110. The pharmaceutical composition of claim 109, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

111. The pharmaceutical composition of claim 109, wherein said KGF polypeptide is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

112. The pharmaceutical composition of claim 109, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

113. The pharmaceutical composition of claim 109, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50`th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

114. The pharmaceutical composition of claim 109, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

L' Cont.

115. The pharmaceutical composition of claim 109, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

116. The pharmaceutical composition of claim 109, wherein said polypeptide is unglycosylated.

117. The pharmaceutical composition of claim 109, wherein the polypeptide is glycosylated.

118. The pharmaceutical composition of claim 109, wherein said polypeptide comprises Met at the amino terminus.

119. The pharmaceutical composition of claim 109, wherein said polypeptide or segment thereof further comprises amino acids 1-31 of Figure 7.

120. The pharmaceutical composition of claim 119, wherein said polypeptide is unglycosylated.

121. The pharmaceutical composition of claim 119, wherein the polypeptide is glycosylated.

122. The pharmaceutical composition of claim 119, wherein said polypeptide comprises Met at the amino terminus.

123. The pharmaceutical composition of claim 116, wherein the polypeptide is a segment of the KGF polypeptide of Figure 7.

124. The pharmaceutical composition of one of claims 109 to 123, which is suitable for topical administration.

125. The pharmaceutical composition of one of claims 109 to 123, which is suitable for systemic administration.

L' Cont.

126. A pharmaceutical composition comprising a keratinocyte growth factor (KGF) polypeptide and a pharmaceutically acceptable carrier, wherein the polypeptide is prepared by expressing a DNA encoding a polypeptide having a sequence comprising amino acids 32 - 194 of Figure 7 in an isolated host cell and isolating said KGF polypeptide, wherein said DNA is optionally operably linked to a recombinant KGF promoter.

127. The pharmaceutical composition of claim 126, wherein said cell is selected from the group consisting of a bacterial cell, a fungal cell, a mammalian cell and an insect cell.

128. The pharmaceutical composition of claim 127, wherein said cell is a bacterial cell.

129. The pharmaceutical composition of claim 127, wherein said cell is a mammalian cell.

130. The pharmaceutical composition of claim 126, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

131. The pharmaceutical composition of claim 126, wherein said KGF polypeptide is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

132. The pharmaceutical composition of claim 126, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

133. The pharmaceutical composition of claim 126, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50`th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

134. The pharmaceutical composition of claim 126, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

L1 Cont.

135. The pharmaceutical composition of claim 126, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

136. The pharmaceutical composition of claim 126, wherein said polypeptide is unglycosylated.

137. The pharmaceutical composition of claim 126, wherein the polypeptide is glycosylated.

138. The pharmaceutical composition of claim 126, wherein said polypeptide comprises Met at the amino terminus.

139. The pharmaceutical composition of claim 126, wherein said polypeptide or segment thereof further comprises amino acids 1-31 of Figure 7.

140. The pharmaceutical composition of claim 139, wherein said polypeptide is unglycosylated.

141. The pharmaceutical composition of claim 139, wherein the polypeptide is glycosylated.

142. The pharmaceutical composition of claim 139, wherein said polypeptide comprises Met at the amino terminus.

143. The pharmaceutical composition of claim 136, wherein the polypeptide is a segment of the KGF polypeptide of Figure 7.

144. The pharmaceutical composition of one of claims 126 to 143, which is suitable for topical administration.

145. The pharmaceutical composition of one of claims 126 to 143, which is suitable for systemic administration.

L' Cont.

146. A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide and a pharmaceutically acceptable carrier, wherein the polypeptide comprises the amino acid sequence 32 to 194 of Figure 7 or a segment of said sequence, and wherein said segment has mitogenic activity on BALB/MK cells.

147. The pharmaceutical composition of claim 146, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

148. The pharmaceutical composition of claim 146, wherein said KGF polypeptide is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

149. The pharmaceutical composition of claim 146, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

150. The pharmaceutical composition of claim 146, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50`th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

151. The pharmaceutical composition of claim 146, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

152. The pharmaceutical composition of claim 146, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

153. The pharmaceutical composition of claim 146, wherein said polypeptide is unglycosylated.

154. The pharmaceutical composition of claim 146, wherein the polypeptide is glycosylated.

L1 cont.

155. The pharmaceutical composition of claim 146, wherein said polypeptide comprises Met at the amino terminus.

156. The pharmaceutical composition of claim 146, wherein said polypeptide or segment thereof further comprises amino acids 1-31 of Figure 7.

157. The pharmaceutical composition of claim 156, wherein said polypeptide is unglycosylated.

158. The pharmaceutical composition of claim 156, wherein the polypeptide is glycosylated.

159. The pharmaceutical composition of claim 156, wherein said polypeptide comprises Met at the amino terminus.

160. The pharmaceutical composition of claim 153 wherein the polypeptide is a segment of the KGF polypeptide of Figure 7.

161. The pharmaceutical composition of one of claims 146 to 160, which is suitable for topical administration.

162. The pharmaceutical composition of one of claims 146 to 160, which is suitable for systemic administration.

163. A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide and a pharmaceutically acceptable carrier comprising the amino acid sequence 32-194 of Figure 7 or a segment thereof wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78.

164. The pharmaceutical composition of claim 163, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

L Cont'

165. The pharmaceutical composition of claim 163, wherein said KGF polypeptide is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

166. The pharmaceutical composition of claim 163, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

167. The pharmaceutical composition of claim 163, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50`th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

168. The pharmaceutical composition of claim 163, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

169. The pharmaceutical composition of claim 163, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

170. The pharmaceutical composition of claim 163, wherein said polypeptide is unglycosylated.

171. The pharmaceutical composition of claim 163, wherein the polypeptide is glycosylated.

172. The pharmaceutical composition of claim 163, wherein said polypeptide comprises Met at the amino terminus.

173. The pharmaceutical composition of claim 163, wherein said polypeptide or segment thereof further comprises amino acids 1-31 of Figure 7.

174. The pharmaceutical composition of claim 173, wherein said polypeptide is unglycosylated.

175. The pharmaceutical composition of claim 173, wherein the polypeptide is glycosylated.

176. The pharmaceutical composition of claim 173, wherein said polypeptide comprises Met at the amino terminus.

177. The pharmaceutical composition of claim 170 wherein the polypeptide is a segment of the KGF polypeptide of Figure 7.

178. The pharmaceutical composition of one of claims 163 to 177, which is suitable for topical administration.

179. The pharmaceutical composition of one of claims 163 to 177, which is suitable for systemic administration.

180. A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide and a pharmaceutically acceptable carrier, wherein the polypeptide comprises amino acid sequence 32-194 of Figure 7 or a segment thereof wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78, wherein said polypeptide or segment thereof has mitogenic activity on BALB/MK keratinocyte cells.

181. The pharmaceutical composition of claim 180, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

182. The pharmaceutical composition of claim 180, wherein said KGF polypeptide is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

183. The pharmaceutical composition of claim 180, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

184. The pharmaceutical composition of claim 180, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50`th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

185. The pharmaceutical composition of claim 180, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

186. The pharmaceutical composition of claim 180, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the

concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

187. The pharmaceutical composition of claim 180, wherein said polypeptide is unglycosylated.

188. The pharmaceutical composition of claim 180, wherein the polypeptide is glycosylated.

189. The pharmaceutical composition of claim 180, wherein said polypeptide comprises Met at the amino terminus.

190. The pharmaceutical composition of claim 180, wherein said polypeptide or segment thereof further comprises amino acids 1-31 of Figure 7.

191. The pharmaceutical composition of claim 190, wherein said polypeptide is unglycosylated.

192. The pharmaceutical composition of claim 190, wherein the polypeptide is glycosylated.

193. The pharmaceutical composition of claim 190, wherein said polypeptide comprises Met at the amino terminus.

L' Cont'

194. The pharmaceutical composition of claim 187 wherein the polypeptide is a segment of the KGF polypeptide of Figure 7.

195. The pharmaceutical composition of one of claims 180 to 194, which is suitable for topical administration.

196. The pharmaceutical composition of one of claims 180 to 194, which is suitable for systemic administration.

197. A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide and a pharmaceutically acceptable carrier, wherein the polypeptide comprises amino acid sequence 32-194 of Figure 7 or a segment thereof wherein the segment is that part of the amino acid sequence of Figure 7 that remains after

the amino acid sequence of Figure 7 is truncated from the C terminus toward the N terminus, wherein said polypeptide or segment thereof has mitogenic activity on BALB/MK keratinocyte cells.

198. The pharmaceutical composition of claim 197, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

199. The pharmaceutical composition of claim 197, wherein said KGF polypeptide is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

200. The pharmaceutical composition of claim 197, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

201. The pharmaceutical composition of claim 197, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50`th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

202. The pharmaceutical composition of claim 197, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

203. The pharmaceutical composition of claim 197, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

204. The pharmaceutical composition of claim 197, wherein said polypeptide is unglycosylated.

205. The pharmaceutical composition of claim 197, wherein the polypeptide is glycosylated.

206. The pharmaceutical composition of claim 197, wherein said polypeptide comprises Met at the amino terminus.

207. The pharmaceutical composition of claim 197, wherein said polypeptide or segment thereof further comprises amino acids 1-31 of Figure 7.

208. The pharmaceutical composition of claim 207, wherein said polypeptide is unglycosylated.

209. The pharmaceutical composition of claim 207, wherein the polypeptide is glycosylated.

210. The pharmaceutical composition of claim 207, wherein said polypeptide comprises Met at the amino terminus.

211. The pharmaceutical composition of claim 204 wherein the polypeptide is a segment of the KGF polypeptide of Figure 7.

212. The pharmaceutical composition of one of claims 180 to 211, which is suitable for topical administration.

213. The pharmaceutical composition of one of claims 180 to 211, which is suitable for systemic administration.

L1 Cont.

214. A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide and a pharmaceutically acceptable carrier, wherein the polypeptide comprises amino acid sequence 32-194 of Figure 7 or a segment thereof, wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78 and is truncated from the C terminus toward the N terminus, wherein said polypeptide or segment thereof has mitogenic activity on BALB/MK keratinocyte cells.

215. The pharmaceutical composition of claim 214, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

216. The pharmaceutical composition of claim 214, wherein said KGF polypeptide is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

217. The pharmaceutical composition of claim 214, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

218. The pharmaceutical composition of claim 214, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50`th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

219. The pharmaceutical composition of claim 214, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

220. The pharmaceutical composition of claim 214, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

221. The pharmaceutical composition of claim 214, wherein said polypeptide is unglycosylated.

222. The pharmaceutical composition of claim 214, wherein the polypeptide is glycosylated.

223. The pharmaceutical composition of claim 214, wherein said polypeptide comprises Met at the amino terminus.

224. The pharmaceutical composition of claim 214, wherein said polypeptide or segment thereof further comprises amino acids 1-31 of Figure 7.

225. The pharmaceutical composition of claim 224, wherein said polypeptide is unglycosylated.

226. The pharmaceutical composition of claim 224, wherein the polypeptide is glycosylated.

227. The pharmaceutical composition of claim 224, wherein said polypeptide comprises Met at the amino terminus.

228. The pharmaceutical composition of claim 221 wherein the polypeptide is a segment of the KGF polypeptide of Figure 7.

229. The pharmaceutical composition of one of claims 214 to 228, which is suitable for topical administration.

230. The pharmaceutical composition of one of claims 214 to 228, which is suitable for systemic administration.

231. A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide and a pharmaceutically acceptable carrier, wherein said polypeptide comprises amino acids 32-194 of Figure 7.

232. The pharmaceutical composition of claim 231, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

233. The pharmaceutical composition of claim 231, wherein said KGF polypeptide is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

234. The pharmaceutical composition of claim 231, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

235. The pharmaceutical composition of claim 231, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells,

stimulates less than 1/50'th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

236. The pharmaceutical composition of claim 231, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

237. The pharmaceutical composition of claim 231, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

238. The pharmaceutical composition of claim 231, wherein said polypeptide is unglycosylated.

239. The pharmaceutical composition of claim 231, wherein the polypeptide is glycosylated.

240. The pharmaceutical composition of claim 231, wherein said polypeptide comprises Met at the amino terminus.

241. The pharmaceutical composition of claim 231, wherein said polypeptide or segment thereof further comprises amino acids 1-31 of Figure 7.

L1 cont.

242. The pharmaceutical composition of claim 241, wherein said polypeptide is unglycosylated.

243. The pharmaceutical composition of claim 241, wherein the polypeptide is glycosylated.

244. The pharmaceutical composition of claim 241, wherein said polypeptide comprises Met at the amino terminus.

245. The pharmaceutical composition of one of claims 231 to 244, which is suitable for topical administration.

246. The pharmaceutical composition of one of claims 231 to 244, which is suitable for systemic administration.

247. A pharmaceutical composition comprising a keratinocyte growth factor (KGF) polypeptide and a pharmaceutically acceptable carrier, wherein the polypeptide is prepared by expressing a DNA encoding a polypeptide comprising the amino acid sequence 32-194 of Figure 7 or a segment of said sequence, wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78, in an isolated host cell and isolating said KGF polypeptide.

248. The pharmaceutical composition of claim 247, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

249. The pharmaceutical composition of claim 247, wherein said KGF polypeptide is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

250. The pharmaceutical composition of claim 247, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

251. The pharmaceutical composition of claim 247, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50`th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

252. The pharmaceutical composition of claim 247, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

253. The pharmaceutical composition of claim 247, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the

concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

254. The pharmaceutical composition of claim 247, wherein said polypeptide is unglycosylated.

255. The pharmaceutical composition of claim 247, wherein the polypeptide is glycosylated.

256. The pharmaceutical composition of claim 247, wherein said polypeptide comprises Met at the amino terminus.

257. The pharmaceutical composition of claim 247, wherein said polypeptide or segment thereof further comprises amino acids 1-31 of Figure 7.

258. The pharmaceutical composition of claim 257, wherein said polypeptide is unglycosylated.

259. The pharmaceutical composition of claim 257, wherein the polypeptide is glycosylated.

260. The pharmaceutical composition of claim 257, wherein said polypeptide comprises Met at the amino terminus.

261. The pharmaceutical composition of claim 254 wherein the polypeptide is a segment of the KGF polypeptide of Figure 7.

262. The pharmaceutical composition of one of claims 247 to 261, which is suitable for topical administration.

263. The pharmaceutical composition of one of claims 247 to 261, which is suitable for systemic administration.

264. A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide and a pharmaceutically acceptable carrier, wherein the polypeptide comprises the amino acid sequence 32 to 194 of Figure 7 or a segment of said sequence, wherein said segment stimulates mitogenic activity in epithelial cells.

265. The pharmaceutical composition of claim 264, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

266. The pharmaceutical composition of claim 264, wherein said KGF polypeptide is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

267. The pharmaceutical composition of claim 264, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

268. The pharmaceutical composition of claim 264, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50`th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

269. The pharmaceutical composition of claim 264, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

270. The pharmaceutical composition of claim 264, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

271. The pharmaceutical composition of claim 264, wherein said polypeptide is unglycosylated.

272. The pharmaceutical composition of claim 264, wherein the polypeptide is glycosylated.

273. The pharmaceutical composition of claim 264, wherein said polypeptide comprises Met at the amino terminus.

274. The pharmaceutical composition of claim 264, wherein said polypeptide or segment thereof further comprises amino acids 1-31 of Figure 7.

275. The pharmaceutical composition of claim 274, wherein said polypeptide is unglycosylated.

276. The pharmaceutical composition of claim 274, wherein the polypeptide is glycosylated.

277. The pharmaceutical composition of claim 274, wherein said polypeptide comprises Met at the amino terminus.

278. The pharmaceutical composition of 271 wherein the polypeptide is a segment of the KGF polypeptide of Figure 7.

279. The pharmaceutical composition of one of claims 264 to 278 which is suitable for topical administration.

280. The pharmaceutical composition of one of claims 264 to 278, which is suitable for systemic administration.

281. A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide and a pharmaceutically acceptable carrier, wherein the polypeptide comprises amino acid sequence 32-194 of Figure 7 or a segment thereof wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from the C terminus toward the N terminus, wherein said polypeptide or segment thereof stimulates mitogenic activity in epithelial cells.

L Cont.

282. The pharmaceutical composition of claim 281, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

283. The pharmaceutical composition of claim 281, wherein said KGF polypeptide is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

284. The pharmaceutical composition of claim 281, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

285. The pharmaceutical composition of claim 281, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/50`th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

286. The pharmaceutical composition of claim 281, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

287. The pharmaceutical composition of claim 281, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

288. The pharmaceutical composition of claim 281, wherein said polypeptide is unglycosylated.

289. The pharmaceutical composition of claim 281, wherein the polypeptide is glycosylated.

290. The pharmaceutical composition of claim 281, wherein said polypeptide comprises Met at the amino terminus.

291. The pharmaceutical composition of claim 281, wherein said polypeptide or segment thereof further comprises amino acids 1-31 of Figure 7.

292. The pharmaceutical composition of claim 291, wherein said polypeptide is unglycosylated.

293. The pharmaceutical composition of claim 291, wherein the polypeptide is glycosylated.

294. The pharmaceutical composition of claim 291, wherein said polypeptide comprises Met at the amino terminus.

295. The pharmaceutical composition of 288 wherein the polypeptide is a segment of the KGF polypeptide of Figure 7.

296. The pharmaceutical composition of one of claims 281 to 295 which is suitable for topical administration.

297. The pharmaceutical composition of one of claims 281 to 295, which is suitable for systemic administration.

298. A pharmaceutical composition comprising an isolated keratinocyte growth factor (KGF) polypeptide and a pharmaceutically acceptable carrier, wherein the polypeptide comprises amino acid sequence 32-194 of Figure 7 or a segment thereof wherein the segment is that part of the amino acid sequence of Figure 7 that remains after the amino acid sequence of Figure 7 is truncated from an N terminus to C terminus direction, within the region of amino acids 32-78 and is truncated from the C terminus toward the N terminus, wherein said polypeptide or segment thereof stimulates mitogenic activity in epithelial cells.

299. The pharmaceutical composition of claim 298, wherein five nanomolar concentration of said polypeptide elicits less than one-fold stimulation over background in NIH/3T3 cells.

300. The pharmaceutical composition of claim 298, wherein said KGF polypeptide is capable of stimulating DNA synthesis in quiescent BALB/MK epidermal keratinocytes at a concentration of 0.1 nM.

301. The pharmaceutical composition of claim 298, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than one-fold stimulation over background in NIH/3T3 fibroblasts.

302. The pharmaceutical composition of claim 298, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells,

stimulates less than 1/50`th of the maximal thymidine incorporation in NIH/3T3 cells stimulated by aFGF or bFGF.

303. The pharmaceutical composition of claim 298, wherein an amount of said polypeptide that stimulates maximal thymidine incorporation in BALB/MK keratinocyte cells, stimulates less than 1/10th of the maximal thymidine incorporation in NIH/3T3 fibroblasts stimulated by EGF or TGF-alpha.

304. The pharmaceutical composition of claim 298, wherein the maximal thymidine incorporation in BALB/MK keratinocytes stimulated by said polypeptide obtained within the concentration range of 0.1 to 3 nanomolar is at least twice that obtained with bFGF within the same concentration range.

305. The pharmaceutical composition of claim 298, wherein said polypeptide is unglycosylated.

306. The pharmaceutical composition of claim 298, wherein the polypeptide is glycosylated.

307. The pharmaceutical composition of claim 298, wherein said polypeptide comprises Met at the amino terminus.

308. The pharmaceutical composition of claim 298, wherein said polypeptide or segment thereof further comprises amino acids 1-31 of Figure 7.

309. The pharmaceutical composition of claim 308, wherein said polypeptide is unglycosylated.

310. The pharmaceutical composition of claim 308, wherein the polypeptide is glycosylated.

311. The pharmaceutical composition of claim 308, wherein said polypeptide comprises Met at the amino terminus.

312. The pharmaceutical composition of 305 wherein the polypeptide is a segment of the KGF polypeptide of Figure 7.